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COLLEGE STRESS TEST IMPROVEMENT REVIEW

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In the following report, Hanover Research provides an overview of annual changes to college and university financial stress levels, following the methodology outlined in *The College Stress Test: Tracking Institutional Futures across a Crowded Market.*

INTRODUCTION

THE COLLEGE STRESS TEST

The College Stress Test: Tracking Institutional Futures across a Crowded Market, by Robert Zemsky, Susan Shaman, and Susan Campbell Baldridge was published in 2020 by The Johns Hopkins University Press. In it, the authors asserted that the financial security of undergraduate institutions can be predicted by examining four key variables linked to market viability: “new student enrollments, net cash price, student retention, and major external funding.” Mapping data from 2008 to 2016 onto institutional closures and mergers, *The College Stress Test* argues that these pieces of information are useful for understanding the financial stress of a college or university and can be used to determine how institutions may be “at risk of considering closure or merging with another school.”

Doing press for the publication, author Zemsky indicated that the greatest predictors of imminent closure or merger are “declining first-year enrollments and increasing market prices over the last 10 years,” although “consistently declining state appropriations” are also a significant danger sign for four-year public institutions. Moreover, the institutions at greatest risk are smaller colleges and universities (in comparison to larger ones) as well as those located in the Plains and Midwest states (while those in New England are at less risk).

The College Stress Test did not identify the individual stress scores of specific institutions preferring instead to emphasize the point that “it is the market that is shifting institutional futures both up and down.”

To ease interpretation and make the results of *The College Stress Test* more actionable for colleges and universities, Hanover Research developed a dashboard that higher education leaders can use to better understand their own institution’s stress as well as how it compares to peers’. This report summarizes changes in stress scores over the past year.

VARIABLES

- New Student Enrollment
- Net Cash Price (Market Price)
- Student Retention
- External Funding (State Appropriation)

STRESS SCORE CALCULATION

CREATING THE DASHBOARD

Hanover's dashboard follows the methodology outlined in *The College Stress Test* book. Each of the four stress variables – new student enrollment, net cash price/market price, student retention, and external funding/state appropriation – is given a stress score ranging from 0-3. The four scores added together result in an overall stress score with a maximum of 12 and a minimum of 0. An overall score of 0 indicates minimal financial stress on the institution for the surveyed year. A score of 12 indicates substantial stress.

For each of the four variables, a negative change above the 20th percentile is assigned 2 stress points. A change within the 10th and 20th percentiles is assigned 1 point, and a change below the 10th percentile receives 0 stress points. An additional point is assigned if the *projected* change is also below the 20th percentile.

The Hanover Research dashboard assesses the stress variables of new student enrollment, net cash price/market price, and external funding/state appropriation by comparing the data from 2013 to 2020, then assigning a score to a single institution's past and projected changes. An institution's performance is also compared against all other reviewed institutions. A positive change above 20.0 percent results in no stress points assigned. For example, if enrollment changed from 100 students in 2013 to 150 students in 2020, an increase of 50.0 percent would be recorded, justifying a "0" stress score for enrollment. Retention is calculated by comparing the actual 2020 retention level to the projected 2023 level. This method was used instead of a comparative percentage to adjust for the data skew created by the Covid 19 pandemic.

Because private institutions do not receive state appropriations, their funding stress score is calculated as a proportion comparing their endowment to expenses.

The scores for two-year institutions are calculated with some differences to allow for the variation in needs and are detailed on the page highlighting improvements among two-year institutions.

GREATEST IMPROVEMENT

Among public four-year institutions, five have seen their risk score decline by 4 or more points in the past year. A couple of these institutions continue to experience moderate or substantial risk despite the improvement. However, a several universities moved into the minimal risk category – Fort Fort Valley State University, University of Southern Mississippi, and
Lamar University.

Fort Valley State University's improvements were concentrated in the enrollment and market price categories. FVSU improved its enrollment score with a sharp increase from 388 students enrolled in 2019 to just over 1,000 in 2020. It managed this enrollment growth while maintaining a steady retention rate of 73 percent. At the same time, FVSU's market price moved from $4,771 in 2019 to $6,925 in 2020.

Lamar University showed improvements over multiple categories for an overall net gain. For example, Lamar's retention rate improved from 53 percent to 69 percent, though retention still contributes a point to the university's risk score. Improvements in market price, where Lamar's stress score improved from 3 to 0, had a more substantial impact on its overall risk assessment. Finally, state appropriations increased by 26 percent between 2013 and 2020 resulting in 0 stress points.

The University of Southern Mississippi, which was previously under substantial risk, moved into the minimal risk category through strong strides in student retention. Having previously been on a slow downward trajectory, its retention rate improved from 68 percent in 2019 to 75 percent in 2020. It has also gained in market price over the long term. While enrollments declined slightly, the dip was not enough to affect USM's stress score. A projected downward trend in state appropriations, however, contributes a stress point to the university's financial outlook.

Fort Valley State University (GA)		
	2021	2022
New Student Enrollment	3	0
Student Retention	0	0
Market Price	3	1
State Appropriation	0	0
Total Risk Score	6	1

Lamar University (TX)		
	2021	2022
New Student Enrollment	2	0
Student Retention	0	1
Market Price	3	0
State Appropriation	0	0
Total Risk Score	5	1

University of Southern Mississippi (MS)		
	2021	2022
New Student Enrollment	0	0
Student Retention	3	0
Market Price	0	0
State Appropriation	2	1
Total Risk Score	5	1

PRIVATE NOT-FOR-PROFIT INSTITUTIONS

GREATEST IMPROVEMENT

Within the private not-for profit space, 77 colleges and universities moved from the substantial risk category to moderate or minimal risk. Within this group, 21 institutions had an improvement of 4 or more points in their risk score, and six improved by at least 5 points. The most improved institutions were Wheeling University, Oakwood University, and Converse University, which all improved their risk score by 6+.

Wheeling University improved in all categories except its endowment to expense ratio. That ratio was .30 in 2019 and increased to .40 in 2020, but not enough to alter the stress score. Meanwhile, Wheeling's reported retention rate improved dramatically and its enrollment also grew from 121 in 2019 to 188 in 2020. Wheeling's current risk score of 4 still places it in the substantial risk category, but the improvements shown over the past year can likely be applied to a process of continuous improvement that will ultimately enable the university to minimize its financial risk.

Oakwood University improved its overall risk score of 6 to 0, with steady improvements over three risk ratings. Most notably, Oakwood's endowment to expense ratio improved significantly between 2013 (0.22) and 2020 (0.35). Despite a small drop from 2019, this 60 percent growth establishes a strong trendline and enables Oakwood to project continued improvement in the future. In more short-term trends, the university saw small gains in enrollment and retention from 2019 to 2020.

Converse College brought all its stress scores to 0, with the greatest improvement in market price. Converse's market price changed from $9,818 in 2018 to $18,287 in 2020, putting the college on a more secure financial footing. Its endowment to expense ratio also improved slightly in this period, though its longer trendline to 2013 is largely flat.

Wheeling University (WV)		
	2021	2022
New Student Enrollment	3	1
Student Retention	3	0
Market price	2	0
Endowment/Expense	3	3
Total Risk Score	11	4

Oakwood University (AL)		
	2021	2022
New Student Enrollment	2	0
Student Retention	2	0
Market Price	2	0
Endowment/Expense	0	0
Total Risk Score	6	0

Converse College (SC)		
	2021	2022
New Student Enrollment	0	0
Student Retention	1	0
Market Price	3	0
Endowment/Expense	2	0
Total Risk Score	6	0

GREATEST IMPROVEMENT

Hanover calculates that nearly half of two-year public colleges are under some amount of stress, with 34 facing a moderate risk assessment and 13 percent a substantial risk assessment. Over the past year 11 colleges improved their risk score by 4 or more, all of them moving out of the substantial risk category to moderate or minimal risk. Within this group, Cisco College and Rainy River Community College had the most significant improvements.

Cisco College's improvement came through rebounds in its state and local appropriations as well as its tuition income to expense ratio. 2019 saw a sharp decline in appropriations for the college, falling from $7.5 in 2018 to $6.8 million that year. In 2020, its appropriations once again topped $7 million. Similarly, its ratio of tuition to expenses improved from 0.17 to 0.19 from 2019 to 2020, continuing a broader trend of growth 0.10 in 2013.

Rainy River's appropriations similarly increased from $1.6 to $1.7 million, following a few years of decline. The college's tuition income to expense ratio declined slightly from 2013 to 2020, falling by -0.27 percent, but this change outperforms many two-year colleges and also positions Rainy River for projected growth in the coming years.

Cisco College (TX)		
	2021	2022
New Student Enrollment	0	0
Tuition/Expense	3	0
State & Local Appropriation	2	0
Total Risk Score	5	0

Rainy River Community College (MN)		
	2021	2022
New Student Enrollment	3	1
Tuition/Expense	0	0
State & Local Appropriation	3	0
Total Risk Score	6	1

METHODOLOGY NOTE

The calculation methods are slightly adjusted for two-year institutions in recognition of their differences from four-year institutions. There are three total risk categories for two-year colleges. Enrollment (which is the same as for four-year institutions), Appropriations (which includes state and local sources), and Tuition Income to Expense ratio (in place of market price). Student retention is deleted from the calculation, allowing for a total potential score of 9 at the highest stress rating.

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